

General Information

1991
Video: 3 Heads Rotary
Audio: Fixed Head 1CW
Covers Models:
Akai VS-F300
Akai VC-F320

Matrix	
Item	See Model
Mechanical Parts View	Akai VS-422/425 89/90 Book.
Mechanical Adjustments	Akai VS-F10/11 91/92 Book.
Back Tension Adjustment	Akai VS-F260
Electrical Adjustments	Akai VS-F260
Power Supply - VS-F320 EM	Akai VS-F260
VIF Unit	Akai VS-F260
R/C Other	Akai VS-F260

Recommended Safety Parts		
Item	Part No.	Description
FR201	ER-400959J	R Fuse V TO5 ERD2FCV1/4W1200G
FR202	ER-404093J	R Fuse V TO5 RF25SCVTP1/4WR56K
FR350	ER-400729J	R Fuse V TO5 RF25SCVTP1/4WR47K
FR501	ER-404092J	R Fuse H S10 RF25S 1/4W R56J
TR20	ET-389417J	TR 2SD2096 E,F TO5
TR210	ET-389417J	TR 2SD2096 E,F TO5 Except EM)
D1 - D12	ED-511907	D.Silicon 1N4002 100/1.0A
D16	ED-404029J	D.Zener H.UTZJ10B T26
FR1 - FR4	ER-404029J	R.Fuse V TO5 RF25SCVTP1/4WR12K
FR5	ER-400605J	R.Fuse V TO5 ERD2FCV 1/4W15ROG
TR1	ET-381175J	TR2SD1856
TR2, TR7	ET-366365	TR2SB1185 E,F
TR3 - TR6	ET-380685J	TR2SD1761 E,F,G
EM Only:		
C101	EC-389414J	C CE V DE7 B102K
D1, D2		
D3, D4	ED-511907	D Silicon 1N4002 100/1.0A
D6, D8, D11	ED-386226J	D Schottky RB100AT-32T26 40/1
D17, D18		
D23 - D26, D101	ED-511907	D.Silicon 1N4002 100/1.0A
FR1 - FR4	ER-400728J	R Fuse V TO5 RF 25SCVTP1/4WR12K
R5	ER-405441J	R Fuse V TO5 RF25SCVTP1/4WR27K
FR6, FR101	ER-400689J	R Fuse V TO5 RF25SCVTP1/4WR68K
FR102	ER-401039J	R Fuse V TO5 ERD2FCV 1/4W 3R7J
RL101	EQ-400153J	Relay Pow AG2013 1TR 12V
TR1, TR5,		
TR9, TR13	ET-366365	TR2SB1185 E,F
TR2, TR7, TR12	ET-380685J	TR2SD1761 E,F,G
TR4	ET-366168	TR2SD1292 Q,R
	BT-403252J	Trans Pow V1130 EA (EA)
	BT-403872J	Trans Pow V1130 EK (EK)
	BT-403873J	Trans Pow V1130 EO (EOH)
	BT-403251J	Trans Pow V1130 EM (EM)
	EW-404003M	AC Cord 200 SA-2 with Tube S (EA)

Mechanical Parts List		Description	Part No.	Description	Part No.	Description	Part No.
Description	Part No.	DT BID30X06STL		Lever Damper (S)	ML-387345J	Socket Housing	
6SET20X30SCM PKR FP	ZS-374458	CMT C080	ZS-389853J	Lever Damper (T)	ML-387346J	5062-30-10-13 (PS1)	EJ-387497J
6SET30X080SCM PKR CP	ZG-373900	DT BID30X06STL		Lever Lock Release	ML-387344J	SP Plate Earth	ZG-392294J
		CMT C080	ZS-389853J	Lever Trigger	ML-387402J1	SP Plate Holder	ZG-387348J1
Arm Coupling	ML-387311J2	Earth Brush Part AG	VT-401282J	Lower Drum BLK F300EA	BV- V1123A410D	SP Pull Capstan Brake	ZG-387502J
Arm Damper	ML-391745J2					SP Pull Main Brake	ZG-387320J
Arm Lid Opener	ML-387350J1	Gear Cam Slider (2)	MZ-396021J			SP Pull Reveiw Brake	ZG-387323J
Arm Loading BLK 425A	BL-V1102A140A	Gear Eject	MZ-387335J	Main Brake (S) Part	ML-387316J	SP Pull Slider	ZG-387468J
Arm Pinch Roller (2)		Gear Front Loading	MZ-387333J	Main Brake (T) Part	ML-387318J	SP Pull Tension(2)	ZG-395470J
BLK 425EA	BL-V1102A160A	Gear Toggle(S) LK 425 EA	MZ- V1102A090A	Mecha Deck Blk F300EA	BB- V1130A020B	SP Pull Toggle	ZG-387413J1
Arm Reveiw Part	ML-387277J3	Gear Toggle(T) BLK 425 EA	MZ- V1102A100A			SP Push A/C	ZG-387438J1
Arm Shutter	ML-387349J2			Motor DFX-67B3VWB1		SP Torsion Arm Damper	ZG-395567J
		Gear Worm (2)	MZ-401686J	(Capstan Motor)	BM-400682J1	SP Torsion Coupling	ZG-387403J
Base Drum	MA-387474J2	Gear Worm Wheel	MZ-387332J	Motor E20EL89		SP Torsion Damper (S)	ZG-387421J
Belt Capstan	MB-387289J	Guide Front(2)	SE-395554J	(Drum Motor)	BM-401296J	SP Torsion Damper(T)	ZG-388290J1
BID26X08SRL CMT	ZS-563444	Guide Roller D8 Part	VT-387394J1	Motor Part (Loading Motor)	BM-387503J	SP Torsion Joint (2)	ZG-392831J
BID30X06STL CMT	ZS-379405			Nut Review	ZW-401776J	SP Torsion Load (S)	ZG-387417J
BID30X08STL CMT	ZS-321298					SP Torsion Load (T)	ZG-387418J
BID30X08STL CMT	ZS-321298	Head Combo HVMZA1121A	HR-405340J	PAN20X02STL BZN PS1	ZS-404844J	SP Torsion Release	ZG-387420J
BID30X03STL CMT	ZS-425981	Head E HVFME0020A	HE-390013J	PAN26X12STL CMT	ZS-467796	SP Torsion Review	ZG-387282J
		Holder D-LED	MZ-387430J	PAN30X06STL CMT	ZS-379350	SP Torsion Rew Brake	ZG-404541J
Capstan Brake Park	BL-387458J2	Holder FPC	SZ-387388J	PC () Sensor	EA-387496J	SP Trigger	ZG-387443J
Cassette Load		Holder Head Part B	MZ-402760J	Plate Upper	MZ-387351J1	ST BID30X06STL CMT	ZS-358936
BLK 425EA	BV-V1102A150A	Holder Lever Tension	SZ-38726312	PT BID26X06STL CMT	ZS-365149	ST BID30X12STL CMT	ZS-336714
Cord FFC P .25		Holder Photo Sensor	MZ-387446J	PT BID26X10STL CMT	ZS-389950J	SW Leaf MTS10110MPC1	BS-373099
L = 120 13P (WP1)	EW-389313J	Holder S Sensor	MZ-387445J	Pulley Trigger(2)	MR-391968J	SW Mode Select	
Cushion Cover	SZ-391866J1	Holder Thrust Worm(2)	MR-404544J	PW26X060X050PSL	ZW-389923J	MMSOOO7OZLBO(SW1)	BS-387465J
		Idler Part	MI-387294J	PW31X110X050PSL	ZW-389814J		
D LED GL451 Infrared (D1)	ED-390011J					Tension Arm BLK F600EA	BL- V1123A050A
D LED GL4800		Leader S BLK 425EA	BV- V1102A070A	Retaining Ring Grip		Tension Band Part	ML-390768J1
Infrared (D2)(D3)	ED-390012J	Leader T BLK 425EA	BV- V1102A080A	38OSTL ACP	ZW-332843	Tension Brake Part	ML-395471J1
Disk (2) Part	MT-390954J1			Reveiw Brake Part	ML-387321J	TR Photo PN268 (TR1)	ET-361490
Disk Clutch Part	MZ-387298J3			Rew Brake Part	MZ-404539J	TR Photo PT4800	
				Roller Impedance	MR-387286J1	(TR2)(TR3)	ET-390010J
						TR Photo PT493F (TR4)	ET-390009J
				Slider Brake(2) Part	ML-396018J		
				Slider Front Loading	ML-387428J	Upper Drum BLK F15EA	
				Slider Pinch Part	ML-387431J1	(Except EM)	BV- V11102A420G
				Slider Trigger(2)	ML-404944J		
				Slit W17X032X025PSL	ZW-374445	Upper Drum BLK F320EM	
				SLIT W21X040X050PSL	ZW-387492J	(EM Only)	BV- V1102A420H
				Socket 174074-5 5P (P1)	EJ-381837J		

Service Adjustments

Video REC Current

1: "REC", PAL colour bar signal

2: P2 (REC CURR), JW188 (C.SYNC) & VR1 (REC-CHROMA), VR2 (RECY)

3: Connect an oscilloscope's CH-1 to P2 (REC.CURR) and CH-2 to JW188 (C.SYNC) for triggering. Turn the VR2 (REC-Y) fully counterclockwise.

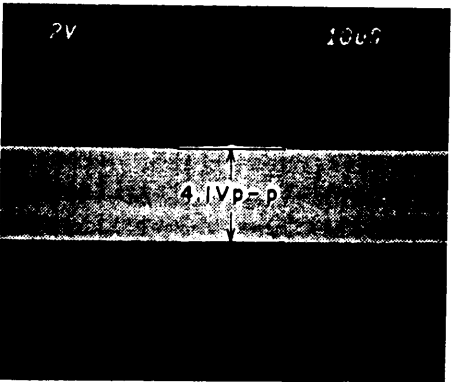
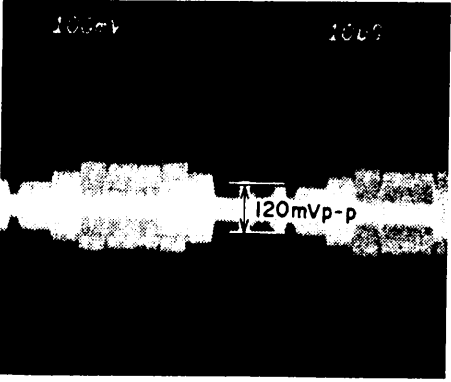
*Adjust VR1 (REC-CHROMA) so that the chroma REC current becomes 120 mVp-p at the burst signal area.

*Disconnect the input signal, then adjust VR2 (REC-Y) so that Y REC current becomes 4.1 Vp-p.

Note: See Matrix for other adjustments.

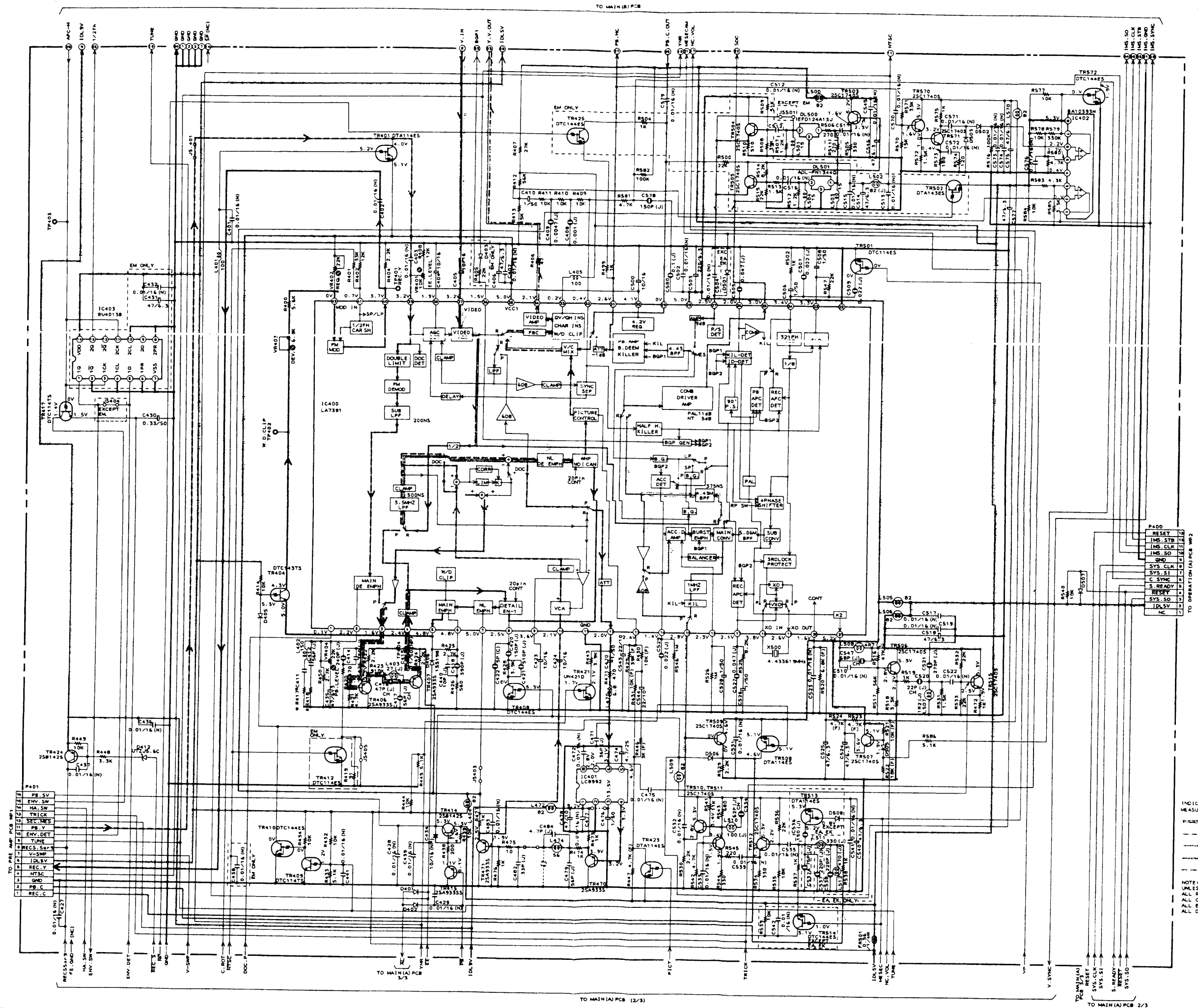
Head Motors and Miscellaneous	
Part No.	Description
BV-V1123A410D	Lower Drum Blk F300EA
BV-V1102A420G	Upper Drum Blk F15EA
BM-401296J	Motor E20EL89 (Drum Motor)
HR-405340J	Head Combo HVMZA1121A
HE-390013J	Head HVFME0020A
BM-400682J1	Motor DFX-67B3VWB1 (Capstan Motor)
BM-387503J	Motor Part (Loading Motor)

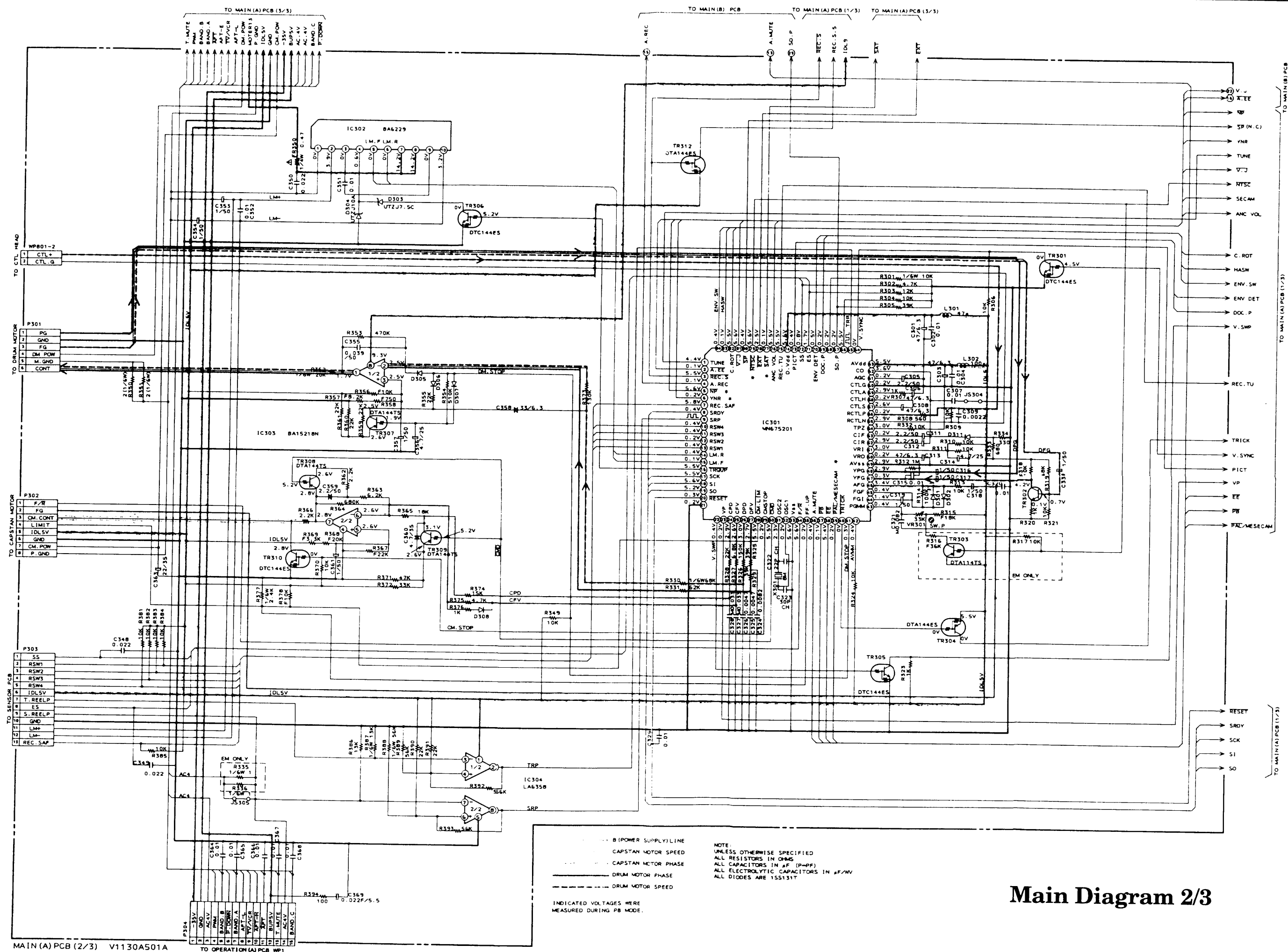
Waveforms

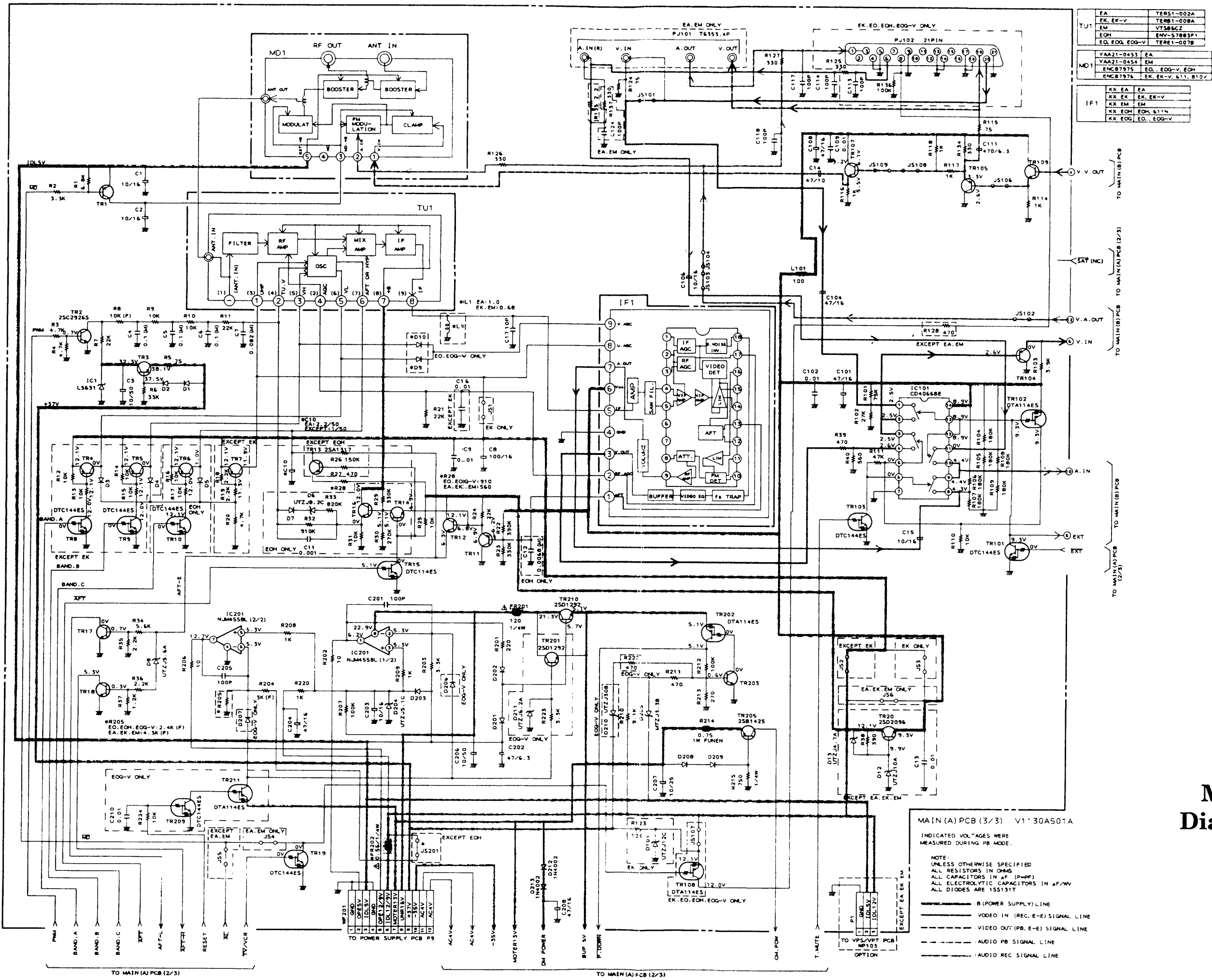




Main Diagram 1/3







Main
Diagram
3/3

EA	TER51-002A
EK, EK-V	TER51-008A
EM	VTS66C2
EQH	ENV-57883P1
EQ, EQH, EQH-V	TER51-007B

YAA21-0453	EA
YAA21-0454	EM
ENC87975	EQ, EQH-V, EQH
ENC87976	EK, EK-V, 6.11, 8.10V

KX, EA	EA
KX, EK	EK, EK-V
KX, EM	EM
KX, EQH	EQH, 6.11V
KX, EQH	EQ, EQH-V

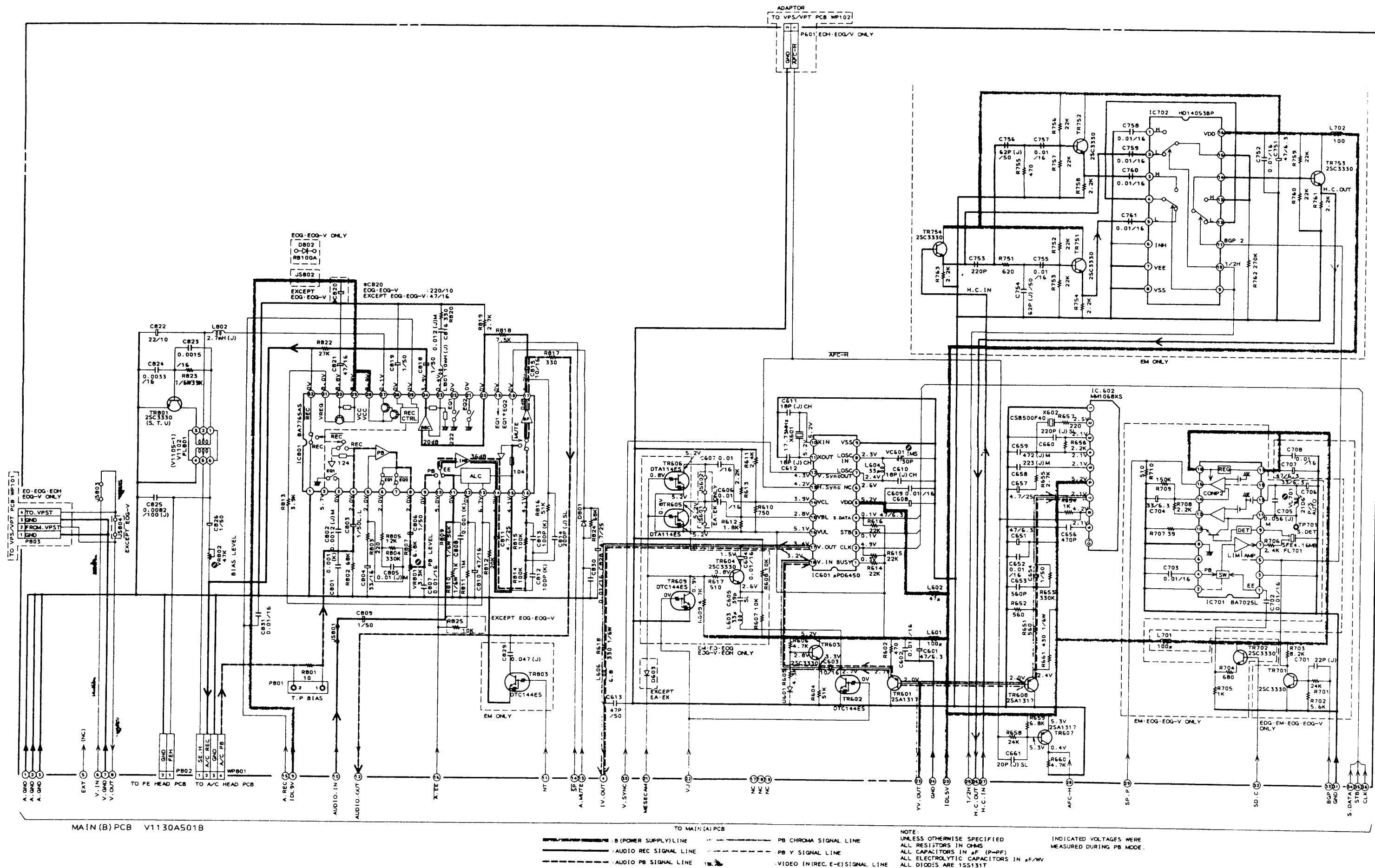
MAIN (A) PCB (3/3) V1'30A501A

INDICATED VOLTAGES WERE
MEASURED DURING PB MODE.

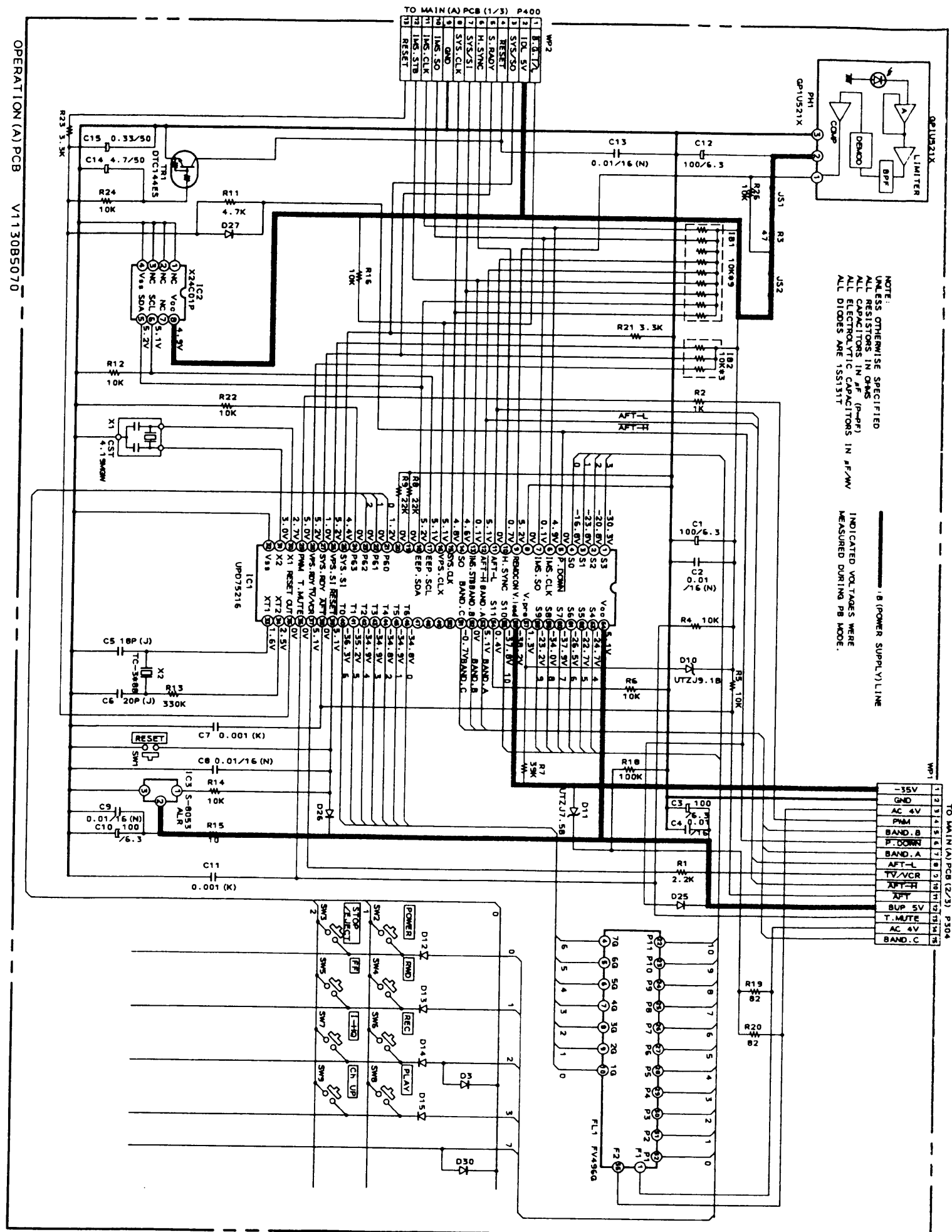
NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN PF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μ F/WV
ALL DIODES ARE 1SS131T

- B (POWER SUPPLY) LINE
- VIDEO IN (REC. E-E) SIGNAL LINE
- VIDEO OUT (PB. E-E) SIGNAL LINE
- AUDIO PB SIGNAL LINE
- AUDIO REC SIGNAL LINE

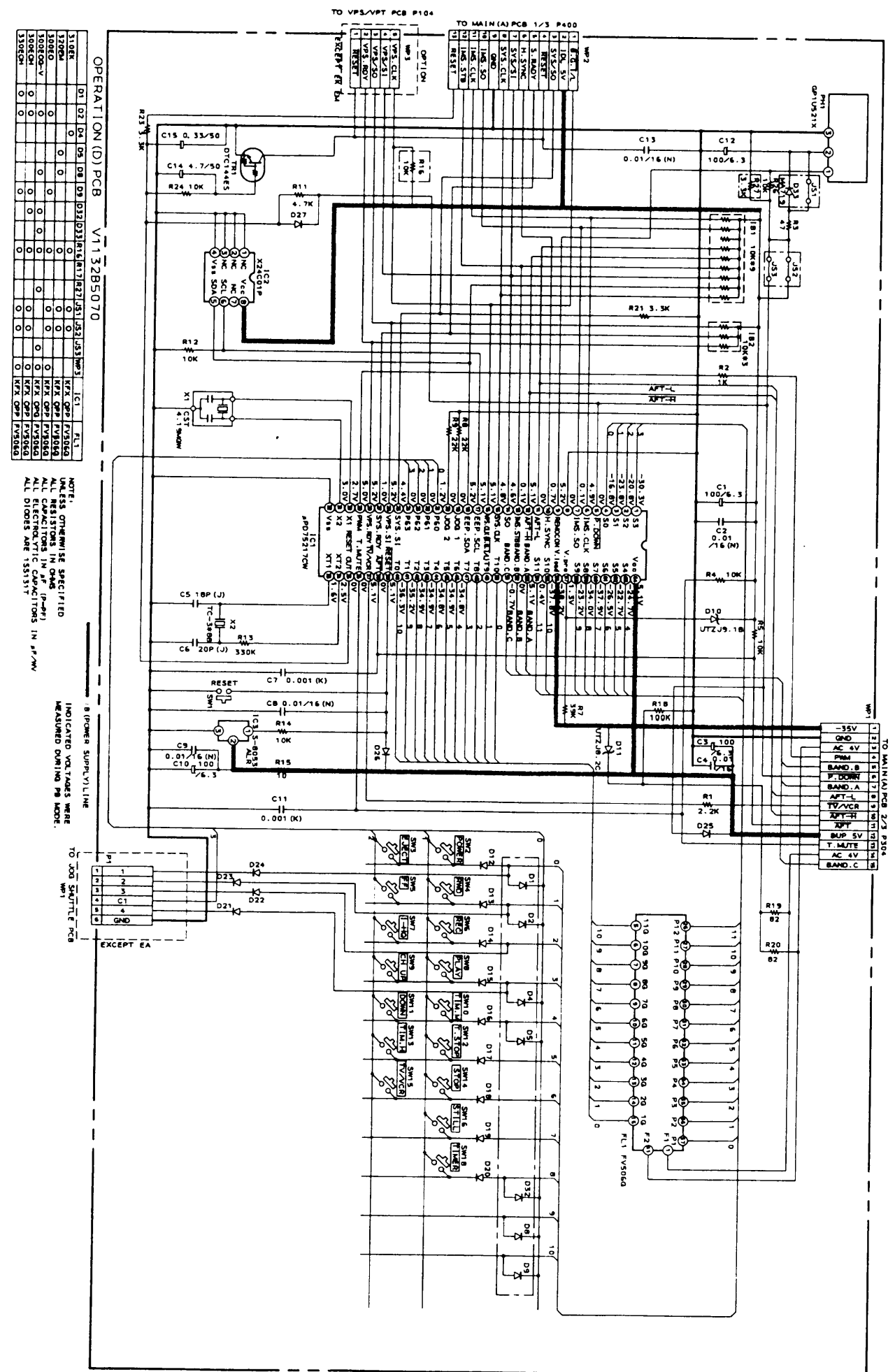
Main Diagram B



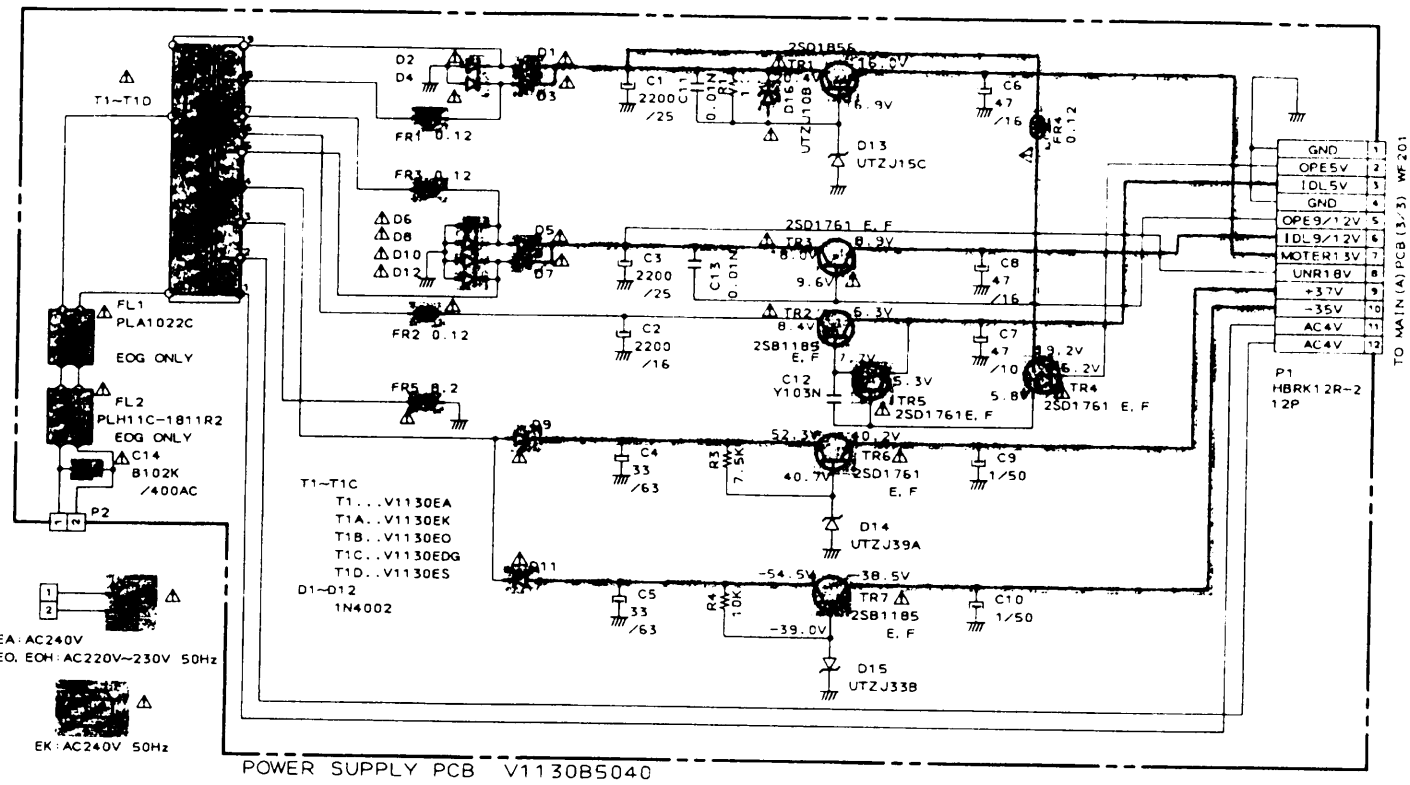
Operation Diagram A



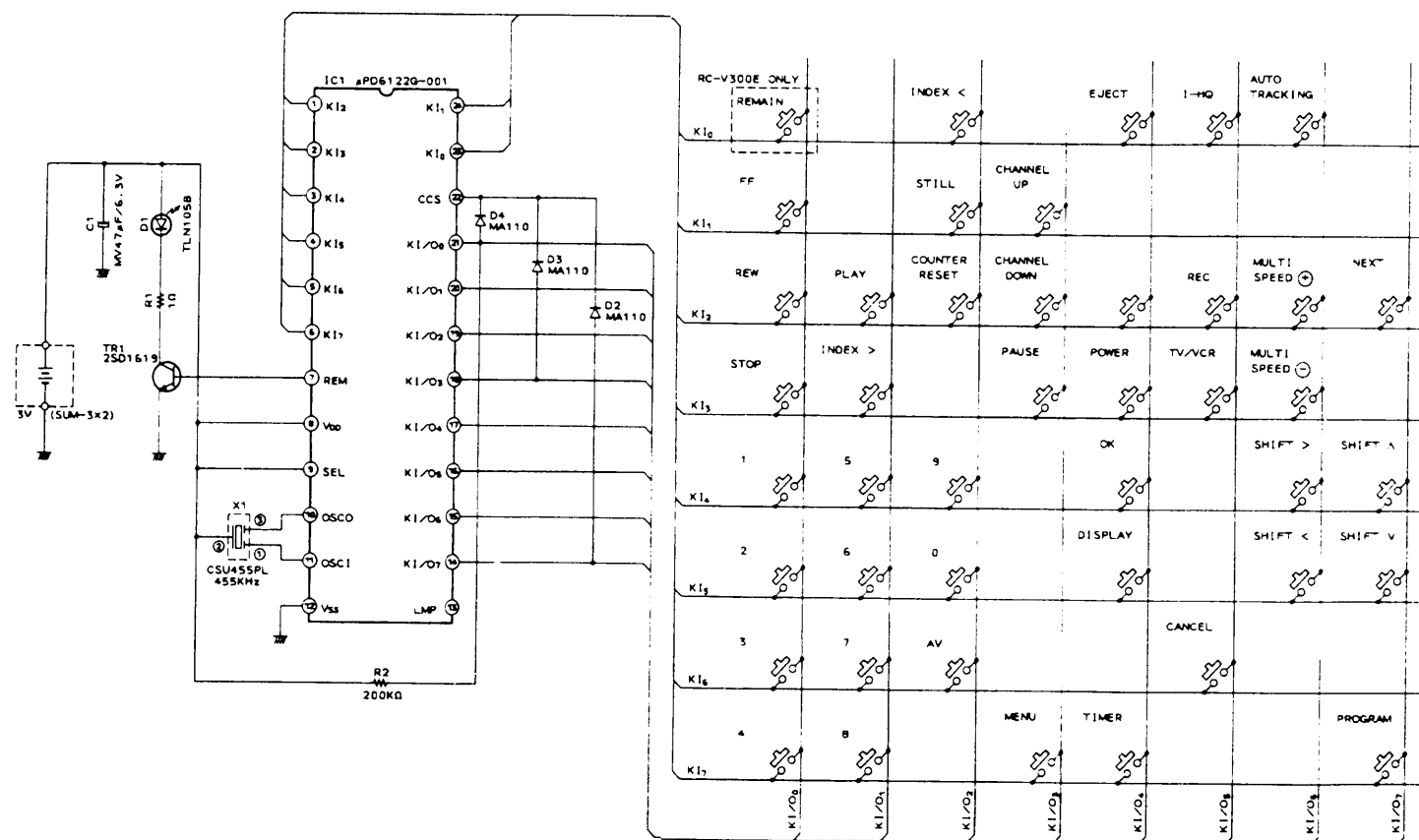
Operation Diagram D



Power Supply Diagram



Remote Control Diagram



Pre Amp Diagram

